

REMARKS

The Final Office Action dated February 9, 2005 has been reviewed and carefully considered. Claims 1-13 are pending, of which claims 1, 4, 6, 9 and 11 are the independent claims. Reconsideration in view of the following remarks is respectfully requested.

The applicants appreciate the Examiner's indication that claim 11 is allowed.

Claims 4-5 and 9-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by McAulay et al. (U.S. Patent No. 4,885,790). Claims 1-3, 6-8 and 12-13 are rejected under 35 U.S.C 103(a) as being unpatentable over McAulay et al. in view of George et al., (U.S. Patent No. 5,504,833).

As the Office Action acknowledges, McAulay fails to disclose storing [amplitude and the frequency] information of each sine wave in a segment in a frame, independently of other segments.

The addition of George fails to cure the infirmities of McAulay. The applicant points out, that, although George stores parameter data [for a pitched musical tone signal], George fails to disclose or suggest storing the amplitude and the frequency of each sine wave in a segment in a frame, independently of other segments. In fact, George mentions, that overlapping frames of

musical signal data and accompanying frames of envelope data required for analysis need to be first isolated... (col. 16, lines 9-13) This data is then input in to parallel Fast Fourier Transform blocks. Thereafter Harmonically-constrained analysis-by-synthesis is used to produce sinusoidal model parameters which approximate the musical data frame (col. 15, lines 23-30). It is at this time George teaches to collect the respective pluralities of sinusoidal model parameters and store them in storage element 1211 (col. 16 lines 45-50).

Thus, the stored respective pluralities of sinusoidal model parameters that is disclosed or suggested in George, are different than "storing the amplitude and the frequency of each sine wave in a segment in a frame, independently of other segments" which the language of claim 1 explicitly requires.

Further, it is not clear what disclosure of George could serve as a proper basis for modifying McAulay, at least because their respective demultiplexing goals and methodologies fundamentally differ.

McAulay teaches a method that includes (a) selecting frames of samples from a waveform; (b) analyzing each frame of samples to extract a set of frequency components; (c) tracking the components from one frame to

the next; and interpolating the values of the components from one frame to the next to obtain a parametric representation of the waveform... While George teaches a method based on an overlapped sinusoidal model using an analysis-by-synthesis procedure which incorporates successive approximation, yielding synthetic waveforms.

For at least all of the above reasons, the references, alone or in combination, fail to anticipate or render obvious the invention as recited in claim 1.

As to independent claims 4, 6, and 9 they likewise recite the same above-quoted limitation as claim 1, and are patentable over the references for at least the same reasons.

The rejections of the dependent claims in this application are dependent from one of the independent claims discussed above and are, therefore, believed allowable and patentable for at least the same reasons.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. Entry of this amendment and a Notice of Allowance is respectfully requested.

Respectfully submitted,

Dan Piotrowski
Registration No. 42,079

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited this date with the United States Postal Service as first-class mail in an envelope addressed to:

COMMISSIONER FOR PATENTS
Alexandria, VA 22313-1450

On June 9, 2005
By Edna Chaper